SEPT 29, 2005 BOARD DIP SWITCH EXPLANATION OAM ISO 200s version V2

DEFAULTS SETTINGS FOR FILL, DISTILLATION, AND OIL TANSFER:

75 MINUTES FILL (OR IF LL H SENSOR SIGNAL SEEN THAT STARTS FILL)
6 MINUTES (TIME FOR OIL TRANSFER)

SW1 is for field use when directed **Dip 1 and Dip 2 CHANGE FILL TIMES TO 5 AND 8 MINUTES**

SW1	SETTING	
DIP SWITCH	1 ON	FILL TIME 5 MINUTES
DIP SWITCH	2 ON	FILL TIME 8 MINUTES
DIP SWITCH	3 NOT USED	
DIP SWITCH	4 NOT USED	
DIP SWITCH	5 NOT USED	
DIP SWITCH	6 ON	ENABLES OAM TO ONLY RUN WHEN IT RECEIVES A RUN SIGNAL
DIP SWITCH	7 ON	DISABLES D3 FAULT ENTIRELY
DIP SWITCH	8 NOT USED	

SW2 ALL DIP SWITCHES MUST BE OFF (*EXCEPT IN DIAGNOSTIC AND BOARD TEST MODE)*

If either Dip 1, Dip 2, Dip 3, or Dip 4 ON activates only the components for the selected Dip Switch(s)
SW2 SWITCHES 6, 8 ON respectively overrides fill & transfer cycles which will only be 10 Seconds long

SW2	DIAGNOSTICS		
DIP SWITCH	1 ON	activates (RLY-1) FILL SOLENOID (SOL 1) ONLY D1 on solid	
DIP SWITCH	2 ON	activates (RLY-2) EQUALIZATION SOLENOID (SOL 2) ONLY D2 on solid	
DIP SWITCH	3 ON	activates (RLY-3) OIL TRANSFER (SOL 3) ONLY D3 on solid	
DIP SWITCH	4 ON	activates (RLY-4) HEATER ONLY D4 on solid	
DIP SWITCH	5 NOT USED		
DIP SWITCH	6 ON	FILL	10 SECONDS
DIP SWITCH	7 NOT USED		
DIP SWITCH	8 ON	OIL TRANSFER	10 SECONDS

DISPLAY LED ENUNCIATION

D1, D2, D3, D4, D5 GREEN LEDS FLASHING AT SAME TIME MEANS BOARD IS IN 5 SECOND START DELAY

D1	GREEN	FLASHING	FILL PHASE (75 minutes UNLESS overridden by LLH SENSOR
D2	GREEN	FLASHING	DISTILLATION 155 DEGREES NOT REACHED
D3	GREEN	FLASHING	OIL TRANSFER (controlled by time 6 minutes)
D4	GREEN	SOLID	HEATER ACTIVATED
D5	GREEN	FLASHING	NO RUN SIGNAL (but ONLY if DIP 6 OF SW1 IS ON
D5	GREEN	SOLID	Refrigerant Liquid Level High Sensor has a Signal

D6 RED FLASHING + SOLID GREEN LED(s) INDICATES A FAULT CONDITION SEE BELOW

DIAGNOSTICS LED ENUNCIATION

D1	GREEN	SOLID	FILL SOLENOID (SOL 1) ONLY SOL SOLENOID ENERGIZED	(diagnostic)
D2	GREEN	SOLID	EQUALIZATION SOLENOID (SOL 2)ONLY SOLENOID ENERGIZED	(diagnostic)
D3	GREEN	SOLID	OIL TRANSFER SOLENOID (SOL 3) ENERGIZED	(diagnostic)
D4	GREEN	SOLID	HEATER ONLY ITEM ENERGIZED	(diagnostic)

FAULTS & ENUNCIATIONS

D6 RED FLASHING & GREEN D1 SOLID	Temp didn't go below 155 within 20 min after start of fill
D6 RED FLASHING & GREEN D2 SOLID	155 degrees F not reached within 6 hours after end of fill
D6 RED FLASHING & GREEN D3 SOLID	Reaches temp within 40 min of beginning of distillation INDICATING GOT TO LITTLE REFRIGERANT TO BEGIN WITH fill fault Will try 12 times before actual fault that is approximately 24 hours
D6 RED FLASHING & GREEN D4 SOLID	Liquid Level High Sensor sees signal for longer than 2 hour in one stretch anytime.

NOTE. If OAM is set to have to have a Run Signal (dip 6 of SW1 ON) and if the OAM does not receive a Chiller Run signal, (i.e. the chiller is turned off) the OAM will suspend operation immediately (NOT FAULT) until it receives a Run signal again. When it receives a Run Signal it will begin a new cycle in the FILL Phase. **D 5 WILL FLASH WHILE NO RUN SIGNAL if** (dip 6 of SW1 ON)**.** When it starts in fill phase, the timed fill **or** liquid level of refrigerant will control how it functions and whether it will fill again or immediately go into distillation

NOTE ISO refers to the isolated neutral that was originally developed for YORK. but now required for all

INPUTS

1. TEMPERATURE SENSOR
2. LIQUID LEVEL HIGH SENSOR
3. NOT USED
4. NOT USED
5. NOT USED
6. RUN SIGNAL
7. ISOLATED NEUTRAL

OUTPUTS

1. FILL SOLENOID	**SOL 1**	**RLY 1 88 FILL OUT**	**BLUE LIGHT**
2. EQUALIZATION SOLENOID	**SOL 2**	**RLY 2 86 EQUAL OUT**	**WHITE LIGHT**
3. OIL SOLENOID	**SOL-3**	**RLY 3 84 TRANSFER OUT**	**CLEAR LIGHT**
4. HEATER		**RLY 4 82 HEATER OUT**	**ORANGE LIGHT**
5. FAULT		**RLY 5 80 FAULT OUT**	**GREEN LIGHT**
6. NOT USED		**RLY 6 78**	

The board AC inputs sink 8uA at 120VAC
The board AC inputs sink 16uA at 240VAC

The board is programmed with a 5 second delay after receiving power before the program starts to allow the opto sensors time to change state. ALL FIVE GREEN LEDS are flashing for those 5 seconds.